

CLAIMS:

1. A device for handling blanks, comprising:
 - a blank pallet-receiving portion;
 - the blank pallet-receiving portion providing a blank-receiving surface;
 - support means positioned adjacent the blank-receiving surface;
 - said support means being operable to support a free edge region of a blank resting on the blank-receiving surface and which free edge region extends beyond the blank-receiving surface;
 - said support means being operable to be retracted or disabled when a predetermined number of blanks are present on the blank-receiving surface.
2. A device as defined in claim 1, further comprising alignment means for aligning adjacent free edge regions of a plurality of blanks on the blank-receiving surface.
3. A device as defined in claim 2 wherein the alignment means includes at least one tamper unit for tamping the blanks.
4. A device as defined in claim 3 wherein the tamper unit includes a frame member with an abutment surface for abutting the blanks.
5. A device as defined in claim 4, the support means further comprising a retractable support member, the retractable support member being mounted for

movement with the frame member.

6. A device as defined in claim 5 wherein the retractable support member includes a ram movable under the drive force of a drive unit.

7. A device as defined in claim 6 wherein the drive unit includes an hydraulic cylinder, a pneumatic cylinder or a solenoid driven linear actuator.

8. A device as defined in claim 1, wherein the blank receiving surface is provided by a pallet or one or more other platens, platforms or frame arrangements, stationary or movable, or combinations thereof, including those which are separate from or integrally formed with a mobile transfer unit.

9. A method of processing blanks, comprising the steps of:

- providing a blank-receiving surface adjacent or downstream from a discharge end of a blank processing machine;
- locating a plurality of blanks on the blank-receiving surface, wherein each of the blanks further includes at least one free edge region which extends beyond a peripheral region on the blank-receiving surface;
- aligning adjacent free edge regions of the plurality of blanks;
- providing support beneath the adjacent free edge region of the blanks; and
- withdrawing the support when the accumulated plurality of blanks exceeds a predetermined number.

10. A method as defined in claim 9, wherein the step of aligning includes abutting the adjacent free edge regions with an abutment member.

11. A method as defined in claim 10 wherein, during the step of providing support, the adjacent free edge regions are prevented from sagging below a point of contact with the abutment member.

12. A method as defined in claim 11 wherein the abutment member is aligned with the blank receiving surface and wherein, during the step of providing support, the free edge is prevented from sagging below the blank receiving surface.

13. A method as defined in claim 12, further comprising the step of providing a retractable support member for movement with the abutment member.

14. A method as defined in claim 13, further comprising the step of mounting the retractable support member on the abutment member.

15. A method as defined in claim 14, further comprising the step of providing a ram to displace the retractable support member, and providing a drive force to displace the ram.

16. A method as defined in claim 15 wherein the step of providing a drive force

includes attaching an hydraulic cylinder, a pneumatic cylinder or a solenoid driven linear actuator to the ram.

17. A method as defined in claim 9 wherein the aligning step is performed at a plurality of locations, each adjacent a corresponding first free edge region.

18. A method as defined in claim 9 wherein the step of providing a blank receiving surface includes providing one or more pallets, or one or more platens, platforms or frame arrangements, stationary or movable, or combinations thereof, including those which are separate from or integrally formed with a mobile transfer unit.

19. A method as defined in claim 17 further comprising the step of providing an anchoring surface at a second free edge region opposite a corresponding first free edge region.

20. A processing line for processing blanks, comprising:
a blank processing station,
a blank receiving unit to be positioned downstream of the blank processing station, the blank receiving unit having a blank receiving surface on which blanks are to be delivered;
support means positioned adjacent the blank-receiving surface;
said support means being operable to support a free edge region of a blank resting on the blank-receiving surface and which free edge region extends beyond the blank-

receiving surface;

said support means being operable to be retracted when a predetermined number of blanks are present on the blank-receiving surface.

21. A processing line as defined in claim 20, further comprising alignment means for aligning at least one adjacent free edge region of a plurality of blanks on the blank receiving surface.

22. A processing line as defined in claim 21 wherein the alignment means includes at least one frame member with an abutment surface for abutting the blanks and displacement means for displacing the frame member between a blank engaged position and a blank disengaged position.

23. A processing line as defined in claim 22, the support means further comprising a retractable support member, the retractable support member being mounted for movement with the frame member.

24. A processing line as defined in claim 23 wherein the retractable support member includes a ram movable under the drive force of a drive unit.

25. A processing line as defined in claim 24 wherein the drive unit includes an hydraulic cylinder, a pneumatic cylinder or a solenoid driven linear actuator.

26. A processing line as defined in claim 20, further comprising conveying means for conveying the blanks between the blank forming station and the blank receiving surface.

27. A processing line as defined in claim 26 wherein the conveying means includes a magnetic conveyor.

28. A device for handling blanks, comprising:

a blank pallet-receiving portion to be positioned downstream of a blank forming machine;

the blank pallet-receiving portion defining a plane substantially parallel with a blank-receiving surface on a pallet positioned on the blank-receiving portion;

a temporary blank support assembly positioned adjacent the plane beyond at least one edge of the blank-receiving surface;

said temporary blank support assembly being operable to support a free edge region of a blank resting on the blank-receiving surface and which free edge region extends beyond the blank-receiving surface;

said blank support assembly being operable to be retracted when a predetermined number of blanks are present on the blank-receiving surface.

29. A device as defined in claim 28, further comprising alignment means for aligning at least one adjacent free edge region of a plurality of blanks on the blank pallet.

30. A device as defined in claim 29 wherein the alignment means includes at least

one frame member with an abutment surface for abutting the blanks and displacement means for displacing the frame member between a blank engaged position and a blank disengaged position.

31. A device as defined in claim 30, the support means further comprising a retractable support member, the retractable support member being mounted for movement with the frame member.

32. A device as defined in claim 31 wherein the retractable support member includes a ram movable under the drive force of a drive unit.

33. A device as defined in claim 32 wherein the drive unit includes an hydraulic cylinder, a pneumatic cylinder or a solenoid driven linear actuator.

34. A device as defined in claim 30, further comprising conveying means for conveying the blanks between the blank forming station and the blank receiving surface.

35. A device line as defined in claim 34 wherein the conveying means includes a magnetic conveyor.

36. A method of processing blanks, comprising:
a step for providing a blank-receiving surface adjacent or downstream from a discharge end of a blank processing machine;

a step for locating a plurality of blanks on the blank-receiving surface, wherein the blanks further include at least one free edge region which extends beyond a peripheral region on the blank-receiving surface;

a step for tamping at least one free edge region of the blanks to align adjacent free edge regions thereof; and

a step for providing temporary support beneath the free edge region of the blanks to prevent the blanks in the free edge from sagging below the plane of the blank-receiving surface; and

a step for withdrawing the temporary support when the accumulated plurality of blanks exceeds a predetermined number.